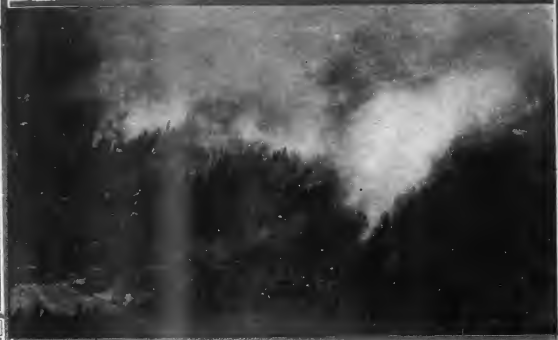


MAY 9, 1921

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AVIATION AND AIRCRAFT JOURNAL



Forest Fire Photographed from an Army Airplane

VOLUME X
Number 19

SPECIAL FEATURES

PARAGRAPH 13, N.A.C.A. REPORT TO PRESIDENT
WHAT THE WEATHER BUREAU DOES FOR AIR PILOTS
BRITISH AIR POWER AND AIR POLICY
WHO'S WHO IN AMERICAN AERONAUTICS
AIRPLANE CRASHES—ENGINE TROUBLES

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225 FOURTH AVENUE, NEW YORK

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AVIATION
AND
AIRCRAFT JOURNAL

VOL. X. NO. 19

Member of the Audit Bureau of Circulations

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AVIATION AND AIRCRAFT JOURNAL

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Vol. X

MAY 8, 1921

No. 19

Reduction of Insurance Rates

ONE of the most important factors in the advancement of aeronautical aeronautics is the question of insurance rates. In no aeronautical business, whether it be a flying school, air transportation, aerial photography or air mail work, can enterprise be dispensed with for any length of time. Nor can capital be induced to finance aerial enterprises as a large scale, until the question of insurance is satisfactorily settled.

At present the insurance companies are actually raising their rates, saying that they have lost money in the business. This raising of rates means demoralization all around, and hampers development generally. On business principles, the insurance companies are of course quite right; their premiums should be such as to leave a reasonable profit, and they cannot be expected to contribute liberally to the aeronautical industry. But is it not possible that a better solution would be not an indiscriminate raising of rates, but a more careful study of each insurance policy written. Certainly, if a pilot asks for pleasure rides a single machine which is beyond completely repair, if the machine is poor, if the mechanic's skill is small, if the territory surrounding the field is poor, the risk is high and the insurance rate should be high accordingly. On the other hand, when a first-class machine, with perfect air and ground personnel is approved by a reputable company, much more reasonable rates should be obtainable than are now charged.

Local Air Legislation

THE various laws dealing with air navigation which are in force in several states of the Union as well as country city ordinances concerning the same subject—which are reproduced in this issue—make interesting reading and are likely to be a revelation to many a pilot.

As might be expected, the American air legislation which is silent in date of issue, that of the town of Kalamazoo, Mich., contains by far the quaintest provisions a pilot has ever been exposed to. The flying machines or lighter-than-air craft which come within the jurisdiction of that town is supposed to be fitted with "horns, whistles or horns, bells, bells and other signaling and controlling apparatus and also, parachute, flying belts and safety air bags"—and to speak of "other safety apparatus" which the government may provide for. "What the ordinance fails to specify, in the nature of these 'flying belts and artificial wings'." All aircraft, which the ordinance terms "airships"—are subject to an annual license tax which works on a sliding scale from one-fifth of a cent to ten dollars, and to a stationery and stationery bill must be paid for each flying field. These taxes are so high that it is extremely improbable that any aviation enterprise would ever select the town of Kalamazoo for its place of business. A particularly thoughtful provision of this ordi-

nance is that which makes it unlawful to collide with telegraph and telephone poles, it being obviously the assumption that aviators delight in that sort of accidents.

While the Kalamazoo ordinance probably represents the extreme in this line of endeavor, there are other local air laws, and ordinances which contain peculiar features. For instance, a paragraph doesn't within the limits of Haverly, N. J., calls for a fine of \$50 for the first offense and for thirty days imprisonment for every successive violation. In the Territory of Alaska and in the city of Newark, N. J., operation of aircraft must have a license issued by the federal government, which comes to say that, as the government does not issue certificates to civilian pilots, the latter cannot legally fly in Alaska or in Newark.

The above examples fittingly illustrate the great need for a prompt enactment of federal air legislation, as urged by President Harding in his address to Congress.

Federal regulation of air navigation alone can provide for the uniform licensing of pilots and the issue of aeronautical certificates to commercial aircraft throughout the country. At the same time it will have to work out the ground organization required by commercial aviation. By providing competent pilots, safe aircraft and the necessary ground organization, federal air legislation will hasten the development of commercial aviation.

"A Lousy Machine"

ONE of the lowest, yet most commonly used expressions in aviation is the phrase "a lousy machine." If a pilot states that a machine is lousy, it is thereby damned. And the expression has been applied to large and small machines of every type.

It would seem useful to analyze what is possibly in the pilot's mind, when he makes an unfavorable comment of this kind. He may mean that the machine is slow to respond to control. What an unsatisfactory way of setting out this fault. It would be much better to say, that the machine is slow to take up a bank or to head down, or anything else in the way of a measure. Or he may mean that the machine has little reserve power.

Suppose a machine is flying at an angle of incidence of 6 deg., cruising speed and a downward gust hits it. The effective angle of incidence is thereby diminished and the machine has a tendency to drop, unless there is reserve power, so that the speed can be immediately increased. A lightly powered machine will thus meet the gust without any difficulty. A "lousy" machine may have a great deal of power, and yet a small reserve relative to the weight and structural resistance of the plane.

If pilots would drop the term "lousy" and particularize their statements and experiences, the designer would be greatly benefited, and the particular airplane under consideration would receive a fairer judgment.

"Paragraph 13" Left Out

Minority Views Omitted in Writing
N.A.A.A. Report to President Harding

The various telegrams and letters printed in the last issue of *AVIATION* and *ARMY AND NAVY* regarding the convening of the majority of the subcommittee of the National Advisory Committee on military air report to the President have brought to the attention of those interested in aviation a situation that evidently requires a great deal of explanation. There is printed herewith a letter from Glenn L. Martin giving his understanding of what happened at the President's call. It is signed by Frank H. Russell, who was also a member of the committee besides Mr. Martin's statements. Dr. C. D. Walcott, Chairman of the Committee, has made a statement which is also printed, and it shows that there was a strong minority view expressed.

The whole controversy is centered over the inclusion of an additional or "fourth" paragraph in the report to the President. This paragraph that the minority desired included was to the effect that the majority of the report was to prevent the consideration of a Unified Air Service later. Two members of the majority Major Walter Kibbe and Col. Anthony Walden were omitted in their desire to have Paragraph 13 included as Dr. Walcott states, and as Mr. Martin and Mr. Russell had left the city with the impression it was to be included, the President was not given the views of the members of the Committee included in the form of a letter which went to him later in a communication. As this was sent to the President with a separate letter, it is hoped that the latter understanding it may be made plain so that it will be known why the minority views were not included by him in his report as a part of the report. Colonel Walden stated in a telegram printed last week that "Both reports were forwarded to the President and together represent the complete recommendation of the Committee."

The hope is generally expressed that the President will appoint a committee of officers who know about the needs of the military air service and that in selecting the membership he will be guided by the fact that the only members who are in a position to give an informed opinion will not act as a rule recommend the satisfaction of governmental aviation. There follow the letters mentioned above.

Statement of Glenn L. Martin

"The answer to your telegram requesting information on the action of the National Advisory Sub-committee for Aeronautics, with particular reference to the discussion of a Department of the Air, was given by the majority of the subcommittee at its meeting. I would like to state briefly as follows:

"In looking over our communications, I feel that the Chairman of the National Advisory Sub-committee for Aeronautics, in answer to my request for a copy of the minutes and report, I received a communication from the National Advisory Committee, in part as follows:

"Although the report on aviation to the President's message may be considered an approval of the Committee's report, the report as a whole has not been passed. Under the custom prevailing, such matters in which the majority report remains the property of the President will be released. I will send you a copy just as soon as it is permissible to do so."

"Now that I have received a copy of the minutes of the meeting of the National Advisory Sub-committee, and am aware that they are released for the consideration of those interested in the subject.

"I shall make no comment on the minutes of the meetings, but perhaps the following statement will answer the question you have in mind.

"The President's letter asked the sub-committee to take up vigorously and fully three definite things, with two sets of

measures to look up; what could and should be done immediately without further legislative action, and what were the recommendations of the sub-committee with legislative action, and the second of these questions of the President's letter was to take up the sub-committee's recommendations.

"Before taking up the definite questions asked, the majority considered it advisable to agree on the general principles of a national aviation policy before proceeding with the specific measures required. These were known as the General Principles, and during the discussion the subject of an Air Force and its advantages was brought up for discussion, and it was suggested by the majority present that the discussion of the workings of an Air Force should not properly come before the committee under the instructions in the President's letter. The entire committee then proceeded with the discussion of the subject, and the majority agreed that the discussion of the subject should be postponed until the general policy is agreed upon.

"The subject of an Air Force was again brought up at its Thursday morning session by Mr. Walden who stated that it was the object of the majority of the Air Force to be made a part of the report to the President.

"I am unable to repeat from memory, word for word, as the discussion, but, briefly, the opposition was to the effect that they did not believe any institution of a Unified Air Force, Army or Navy, or the inclusion of the Air Force in the Department of the Air, should be made a part of the report. It was followed with the statement that I considered it of great importance that the sub-committee make reference to its possible future consideration of an Air Force and that it, in doing the best we could under the restrictions to take up vigorously and fully, cooperation among the various departments of the government concerned.

"After reference to a Department of the Air or Air Force and as none of the paragraphs under the General Principles would interfere with the later consideration of an organization under a Secretary of Air, or the organization of an Air Force, it should be stated in the President's letter. There was further discussion by most of the members, and the last statement, I believe, by Dr. Brewster, who said that the Committee had given a great deal of time and thought to the question of a Department of the Air, and that it (the Committee) could not recommend it, but that there was nothing in what the sub-committee has agreed to do which would be inconsistent with the later consideration of such a Department of the Air.

"The chair recommended it advisable that a sub-committee of the sub-committee be appointed to prepare the report, which was a subcommittee, with Dr. Walden as Chairman, Glenn Messner, Anthony Taylor, Dr. Brewster and Col. Walden as members. The sub-committee was then asked to consider a draft by Mr. Walden in the preparation of a report. We adjourned in one week. Mr. Russell and I went for the adjournment of the sub-committee, looking for Mr. Walden to complete his appointment had been made on the draft, knowing that if the small committee agreed to the things that were desired and discussed, Mr. Russell and I would have Washington that night to attend to possible matters of importance. I was not able to do so, but Dr. Walden at eleven o'clock that night with the Friday night draft, that contained Paragraph 13, which we felt was satisfactory, and Mr. Walden did not consider it necessary to attend to the subject of the sub-committee had been taken care of, and as I look back at the conference on the paragraphs contained in the report, I feel that the recommendations are all sound and do not in any way, represent inconsistent with the later expansion of the Department

Air, and I believe the recommendations of the Advisory Committee for Aeronautics contain some immediate help and relief during the interim required to have a proper consideration of the most vital questions of the proper government and directing "military" necessary to advance military and civil aviation in the United States.

"It is very difficult to give you a correct picture of the work of the sub-committee, and since it has been almost a year since the President's letter to consider some large of separate air service, I believe that the report of the National Advisory Committee for Aeronautics, meeting with the latter agreed by Mr. Walden, Mr. Russell, Major Dr. Brewster, and Col. Walden, with the subject as well as could be expected under the circumstances, and I hope that the President will see fit to ask for a specially appointed committee of the best qualified men to take up the subject to cover the report to him on all phases of the subject."

Statement of Frank H. Russell

"I have your request regarding information with reference to the attitude of the civilian members of the Sub-Committee of the National Advisory Committee for Aeronautics concerning the recommendations recently made to the President. It is impossible to indicate that there is a lack of understanding both within and without the committee concerning this question.

"The consideration of the committee brought up very important questions in the development of the government's policy generally on the attitude of the government towards it. It was shown that already the need for aircraft has manifested itself not only in the operation of the Army, Navy and Post Office, but also in the Department of Agriculture, the Treasury and Commerce. This is naturally made from the position of the utilization of the military air force. The tactical and strategic questions involved in the matter of the development of military aviation in the air, like modern problems in aviation and land, should not be considered a part of the general and military reports. While there has been a marked degree of cooperation between the departments shown named, the question of cooperation in the development of aviation, the public considerably more than it should, through the duplication of planning, engineering, construction and field operations. The industry has been forced to find its way through the very complex and intricate policy on the part of the government. This has resulted in a waste of money in the industry which can hardly be spared at the present time.

"For these reasons I suggested at the first meeting of the subcommittee that attention be given to a simplified branch of the government's development program to the development of aeronautics for commercial needs and as far as was practical for military requirements. The same thought was expressed by Mr. Martin on the second day of the conference with Mr. Walden, and I am sure that the matter would be agreed by Mr. Martin and I were assured that the matter would be agreed in the committee's report.

"The report of the report accompanied a separate letter, written by Mr. Walden to Dr. C. D. Walcott. The committee report, however, did suggest the appointment by the Advisory Committee, of a sub-committee made up of Army, Navy and Post Office officials with two civilians from the industry itself, who shall study the problem of the development of the aircraft industry and shall recommend a policy intended to sustain and develop the industry to meet the needs of the government.

"It is the opinion of the sub-committee that we feel that the question involved in this matter of government control of aeronautics may be carefully and thoroughly investigated. This must be done to the end that the public interest may be protected and the industry may be able to develop the new aviation along lines which will build the country progressively stronger in the air as the best guarantee of national security in times of war and the greatest service to its people in times of peace."

Statement of Dr. C. D. Walcott

"The sub-committee held meetings on April 5, 6, 7 and 8, and it is the opinion of the committee as expressed by two members (Mr. Walden and Major Kibbe) that the report of the com-

mittee should include a statement to the effect that nothing contained in the report is to prevent the consideration of a Unified Air Service or an Independent Air Force at some later date. The majority of the committee, however, was absent from the meeting. A resolution was offered that the report include such a reference to a Unified Air Service or an Independent Air Force. After discussion, this resolution was voted down by a majority of only two members against one. The sub-committee then proceeded with the final preparation of its report as a whole, and when the vote was put upon the motion to approve the report as a whole, for transmission to the President, through the Executive Committee of the National Advisory Committee for Aeronautics, there was no dissenting vote. The Chairman then asked if any member desired to make a motion to take the resolution which had been laid on the table, and there was no response to the question.

"A special meeting of the Executive Committee of the National Advisory Committee for Aeronautics followed immediately upon the adjournment of the sub-committee on Friday morning, April 8, 1932. The report of the sub-committee was submitted, considered by the Executive Committee, and approved by unanimous vote of the members present. Following are the names of the members present at this meeting of the Executive Committee:

Dr. Joseph R. Ames, Chairman;
Dr. W. W. Stratton, Secretary;
Rear Admiral D. W. Taylor, Chief Construction, U. S. Navy;
Major General Charles T. Mencher, Chief of Army Air Service;
Captain W. A. Moffet, Director of Naval Aviation;
Professor Charles F. Marvin, Chief of the Weather Bureau;
Dr. Charles D. Walcott.

"On the evening of the same day (April 8), Mr. Walden handed to the Chairman a memorandum requesting that a certain statement be inserted in the report to the President. This memorandum was signed by Mr. Sidney D. Walcott, Major W. C. Kibbe, U. S. A., Mr. Glenn L. Martin, Mr. Frank H. Russell, the latter two names being attached by Mr. Walcott with explanatory remarks. The report of the sub-committee had been fully prepared, and the Chairman did not feel that he was authorized to include the memorandum as a part of the report approved by the sub-committee and the Executive Committee. The report of the sub-committee was transmitted (April 8), to which a memorandum was attached embodying the substance of the memorandum handed to the Chairman by Mr. Walden. This memorandum stated that the sub-committee was unable to agree to the insertion of the statement that the President's letter justified the consideration of a Department of the Air, a Unified Air Service, or an Independent Air Force, but, having no objection to the inclusion of the statement, they stated "that the President direct the National Advisory Committee for Aeronautics to recommend the same sub-committee to investigate, with a view to making such recommendations as it may deem advisable."

"The statement as it will appear under the plan proposed in this report, in which memoranda will be divided among the Departments of War, Navy, Commerce and Post Office:

1. A Department of the Air;
2. A Unified Air Service;
3. An Independent Air Force."

"Mr. Walden has since expressed the misconception in the form stated to the President with the Chairman's letter of April 9.

"It appeared to be the judgment of the majority of the committee though not expressed in its report, that it was not called upon to express an opinion on a Department of the Air, a Unified Air Service, or an Independent Air Force, and that its recommendations, if carried into effect, would be constructive, and not in any manner interfere with any future recommendations of aviation activities, should that be considered to be desirable.

"No action was made during the meetings of the Sub-Com-

initiative to incorporate in its report the request for further action on the part of the President which was later approved by four members in the recommendation referred to. There was no action to include a minority report, nor was any action given that a minority report would be submitted. Hence the Chairman did not feel justified in considering the recommendation, leading to be lost by Mr. Walden as a minority report. In fact, nothing is stated in the recommendation itself as to the effect.

that it is a minority report. It does not express any dissent from the recommendation contained in the report, but, on the contrary, goes beyond the scope of the report, saying that the President request the National Advisory Committee for Aeronautics to make another investigation and submit report to the President containing definite recommendations as to the relative merits of a department of the Air, a United Air Service, and an Independent Air Force."

Secretary Denby Launches Merchant Seaplane

*Navy Head Anxious to Stimulate Commercial Aviation by
Use of Navy Seaplanes Converted into Commercial Carriers*

The first of a series of naval flying boats converted into commercial carriers was launched last week by Secretary of the Navy Denby in the presence of a distinguished assemblage, comprising Captain W. A. Moffett, Chief of Naval Aviation, members of the Senate and House, the Naval Affairs Committee, foreign air attachés, and many others. These seaplanes belong to the well known Navy H-10-L model, named flying boats which rendered signal service during the war in patrolling the entire Atlantic Coast and in oceanic work. The boats have been converted into six-place commercial carriers by the Aeromarine Plane and Motor Co., of Kynners, N. J., and

Aeromarine Co., took passage in the seaplane and made a flight over Washington, circling around Washington monument, and concluding with a trip to Mount Vernon. This is the first time that a Cabinet member has taken such an important step to encourage commercial aviation and improve the people with the safety of flying.

15,000 Passengers Carried by Aere Limited

Aere Limited, Inc., which claims the distinction of being the fastest air transport line in the United States, having been formed in 1925 and having been in continuous operation ever since, has to date carried 15,000 passengers without any accident. This is a highly gratifying record and it leaves not



SECRETARY DENBY GOING ON BOARD THE AEROMARINE COMMERCIAL FLYING BOAT
Photo C. E. Ross

Capt. W. A. Moffett, Division of Naval Aviation, and Secretary of the Navy Denby

Photo C. E. Ross

are equipped either with a cabin or with open cockpit. The power plant is composed of a 400 hp. Liberty engine, driving a pusher propeller, which gives the machine a maximum speed of 100 m.p.h. The overall span of these boats is 72 ft.

In launching these boats, Secretary Denby said that he considered it of very real importance that our people become familiar with the present day safety and the advantages of commercial aviation. Therefore, in order to stimulate interest in commercial aviation, so that we will have trained men available for national defense in case of an emergency, the Navy Department has authorized a limited number of these well-known aircraft to be sold to the public at one-third their actual cost.

It is believed that those interested in aviation and desiring to keep American commercial aviation abreast of foreign developments will quickly take advantage of this opportunity to procure equipment of such proven reliability as to see a flight.

After the launching Mr. Denby, together with officials of the

the corporation that has an transport line which is operated on safe and sound principles does not involve any more hazards for passengers than any other mode of transport.

Aere Limited exclusively operates flying boats. Its fleet consists mainly of converted H-10-L Navy flying boats that were built in 1925. During the winter months the machines are used for a transport service between Miami, Fla., the Southern headquarters of the company, and Boston and New York, N.Y. Special flights are also made on request to various points of the Florida coast. When the cold season sets in, the flying boats go north and operate in the vicinity of New York in sightseeing work, with special trips to Atlantic City, Newport, Boston, etc. One of the boats of Aere Limited holds the record for the fastest flight between Miami and New York, the total elapsed time being 15 hrs. 35 min.

New executive offices of the company will be opened at the Gotham Bank Building, New York, beginning about May 15. Branch offices or special representations of Aere Limited are besides located at Havana, Cuba; Panama and Boston, D.W.I.; San Francisco; New York; Boston; Lake George, New York, N.Y.; Palm Beach and Miami, Fla.

Aere Limited recently acquired exclusive control of United Air Lines of America.

State and Local Air Laws and Ordinances

The following are abstracts of the laws dealing with air navigation at present in force in States and Municipalities of the United States and Possessions—

State of Connecticut, Waterbury, Conn. New York, Kansas. Towns of Sackett, N. J.; Kinnelon, Fla. Cities of Newark, N. J.; Atlantic City, N. J.; New York, N. Y. County of Los Angeles, Territory of Hawaii

STATE OF CONNECTICUT

June 8, 1931

Registration of machines. Owner file annually with Secretary of State his name, residence and address and description of each aircraft. Secretary of State will assign distinguishing number and issue certificate of registration. Certificate to be carried at all times on the aircraft.

Fee. \$5.00

Transfer of Machine. Upon transfer, registration expires, owner must go to submit Secretary of State of transfer and return certificate.

Markers. Display in conspicuous place plate bearing number issued, in letters not less than 1 1/2 inches.

Inspection. Secretary of State may suspend or revoke for any reason he may deem sufficient.

License of Operator. Operator must be 21 years old and obtain license from Secretary of State, must be capable of properly control or land by him or some property of others where permission from owner has been granted him. License granted after examination in manner determined by Secretary of State or when applicant has made three successful flights as pilot. Unlicensed operator over 18 may operate in company of licensed pilot. Number assigned each license. License must be carried at all times.

Fee. For examination, each year as Secretary of State may require up to \$10.00. For license, \$2.00.

Revocation. Secretary of State may suspend or revoke for any reason he may deem sufficient.

Non-compliance. May operate 10 days if home state laws complied with.

Penalties. Failure to comply with any provisions may result in fine not more than \$100 or 6 months imprisonment, or both.

Responsibility for damage. Pilot responsible for all damage caused by any person. If agent or employee, the principal or employer is liable.

Non-compliance. "Aircraft"—any flying vehicle.

"Aeroplane"—any person who assembles to direct its course.

"Fly"—every kind of locomotion by an aircraft.

STATE OF MASSACHUSETTS

October 11, 1919

Registration of machine. Application should be made to Department of Public Works, Division of Highways.

Fee. \$2.00

Markers. Machine must carry identification number of which are displayed in such a position as may be ordered by the Division of Highways, when opening registration certificate.

License of Operator. Applicant to file application with Division of Highways, Department of Public Works. State of issue, without examination, license to pilots who at any time was commissioned in the Army, Navy or Foreign and to any applicant who has otherwise passed an examination satisfactory to the commission. Permission do not apply to military or naval aviation in service.

Fee. \$5.00

Revocation. Following hearing, license may be definitely refused.

Penalties. Not less than \$10.00 nor more than \$500 or imprisonment for not less than one month or more than six months or both.

Minimum altitude. Operator must not fly at such an altitude as to endanger his own life or the safety of those below.

or the safety of his passengers; or very thickly settled districts are in starting or alighting.

Restricted areas. Highways and public grounds, and thickly settled districts in any city or town, except for the purpose of starting or alighting on designated landing places.

Maintenance. Forbidden to perform dangerous maneuvers over crowd assembly of 100 or more persons, or drop any article in flight, except over grounds devoted to flying or upon water.

Non-compliance. Ordinance applies to all "aircraft"

STATE OF NEW YORK

March 28, 1928

State legislature passed resolution urging the Congress of the United States to enact Federal air laws.

STATE OF KANSAS

April 4, 1923

Registration of machine. Owner file annually with Secretary of State on suitable blank furnished by State Aircraft Board, setting forth name, make, model, description of aircraft and engine. Name and address of owner, etc. Aircraft Board is issued certificate. Manufacturer or dealer may obtain a general license but all aircraft must be licensed or filed in by him. Board will issue general certificate and three license plates. Fee for registration \$25. \$1.00 for each additional license plate of the number assigned.

Fee. \$15.00

Transfer of Machine. Number plates issued shall remain on aircraft and vendor submit board of sale or transfer, giving all details together with fee of \$1.00.

Markers. Number plates and certificate furnished by aircraft board. Marker must be conspicuously displayed on aircraft.

License of Operator. Pilot must submit qualifications to Aircraft Board and be registered.

Fee. \$10.00

Non-compliance. Provision as to registration and licensing will not apply for 30 days, provided laws of home state regarding registration and licensing have been complied with. Non-compliance operating in commercial aviation for same month comply with the Kansas law as if it was a resident.

Penalties. For piloting any aircraft without license, not less than \$25 or more than \$500. For violation of any other provision not less than \$25, and not more than \$500.

Revised statute. 225 ft. over any persons or 1,000 ft. above any city, except in the event of fire, forced landing or at becoming or out of flight.

Maintenance. Forbidden to engage in aerobics over lands of any city or center of population or to fly at a height lower than that which endangers any person and at all times in a known or established place on land or water. Provisions do not apply to aircraft owned by the Government or to pilots in the service of the Government.

Prohibition to discharge. Discharge of any firearm, except in the case of an emergency.

Non-compliance. "Aircraft" to include any "airplane, hydroplane, seaplane, dirigible, balloon or other apparatus carrying one or more passengers into or through the air propelled by currents or by power or motor sustained to and against the pilot shall include "any person" during navigation.

TERRITORY OF HAWAII

March 29, 1916

License of operator. Operator of any aircraft must obtain license from the Government. Members of the Army, Navy, Naval Reserve of Hawaii or Naval Militia of Hawaii air service, excepted.

Penalty. Not more than \$1,000 or one year's imprisonment, or both.

[illegible]

Featuring Curbies Avenue

"... The life of Exeter in this situation is the British Isles will be attended with much difficulty. The long and painful and other adverse conditions are a terrible hardship. Moreover, the fact that the Government has not been able to get the roads, which constitute a most formidable impediment to the car. Travelling to, or does not mean travelling from one city to another, but from one neighbourhood to another. The fact that the Government has not been able to get the roads from Africa to their means to reach one or the other of the roads. Thus you have to compete in an aeroplane with those which carry passengers into the heart of the cities, and with those which carry them into the heart of the cities. If you add to this the fact that the Government has not been able to get the roads, it will be seen that we are much less favourably circumstanced, as far as domestic road aviation is concerned, than countries like France, Italy, Spain or, I don't say, the United States. The fact that the Government has not been able to get a very large or a very rapid development of domestic road aviation within these limits. I think the Government might easily have got on very large sums of money, with that exception, and the fact that the Government has not been able to get the roads which we should keep open, and which certainly offers a great prospect of success. I mean the air route from London to Paris and the Continent generally. Have the British air route been so much hampered by the weather conditions? One might say, but the fact that the Government has not been able to get on a travelling, of changing the course of the Channel with its attendant dangers and dis-

The Chairman of the Boarding party has according to the Air Ministry a very wide discretionary power in the spending of the £1,600,000 allotted to civil aviation, provided that the expenditure is not in excess of the £1,600,000. The Boarding party future proposals on the £1,600,000. The sum of £500,000 is included in the Estimates for subsidies to civil aviation in 1935-36, and this sum is based on a scheme proposed by Lord Waverley. The Boarding party has decided to increase the sum to £50 per cent of their gross aircraft sales. However, that the French Government has decided to increase the sum to £50 per cent of their gross aircraft sales. I fear that if we adhere to the scheme of Lord Waverley, our other firms will be so heavily undercut that there will be no encouragement for British firms to continue. I propose to increase the sum to £50 per cent of their gross aircraft sales of the aircraft industry and the aerial transport firms, to devise the necessary alternative methods which will meet these changed conditions, and to make proposals for immediate

ation. If a string can be effected on other parts of the excitation field, the inducements we now offer will be back with greater force than that I cannot say at present.

[illegible][illegible]

How long as I am responsible for the Air Ministry, the policy, which I now submit to the House will continue in substance, if the House supports me, to be what it has been during the last two years, that is to say, it will be first of all a policy of efficiency and economy. It will be a policy which may be feared less, but with particular regard to the importance of maintaining the Cross-Channel Service, secondly, to build up in all its details a properly equipped, efficient fighting service, a healthy, skilled, and well-disciplined body of officers and men, and, thirdly, to maintain a sufficient reserve of aircraft, and to have a sufficient number of aircraft in service with the Royal Air Force, so that we will be able to

only is close and harmonious cooperation and combination with them.⁹

By Mr. JOSEPH HIRSH and I wonder if the House might have more effective air service would be if we had a sufficient number of aircraft carriers. I am not sure that the Navy estimates the enormous power in naval warfare of the torpedo when it attacking big ships or little ships. It is possible to have today torpedo-carrier airplanes flying at height of over 30,000 feet, striking off this range in an hour or so, and dropping a torpedo weighing 1,500 lbs. at 1,000 miles an hour. They can carry a torpedo weighing 1,500 lb. and 1,000 lbs. of T.N.T. All these details have been published in a technical paper to me not given any information as to whether or not the Navy is planning to develop the numerous possibilities of these airplanes. They would be absolutely invisible until within two or three minutes of the vessel to be attacked, whereas a destroyer is visible 10 or 15 minutes away. There are reports of an airplane being fired on by a ship, and the ship being hit, but I believe that all the while knowing that there was a few or five or even ten of these torpedo ships about to attack it, traveling at rate of 145 miles per hour, very difficult to hit even if they were seen. I think that the Navy is planning a great deal of work, it seems being hit by torpedoes and being sunk. Our battleship could possibly cope with three under such con-

Parabuteo et al. *Tyrannidae*[illegible][illegible]

"I think I am right in saying that practically every car Adventure machine is now obsolete, or if it is not so today it certainly will be by the end of this year. That at any rate is the view of most of our experts, and it is distinctly the view of the American Air Service.

Defen Haasler, one of our foremost flying officers. Last month that Association met in Berlin, and the chair was taken by a German. The English companies are out of it altogether. Norway, Sweden, Denmark and Holland are willing to contribute to the first instalment. The British companies, however, and to take their machines from our manufacturers. The whole of that is lost and gone, and before very long—probably this year—Prussia, the Russians and the French will be in a position to take over the whole of it. If so, what will be the position as regards the commercial side, will be raising a new issue. In London, too, and as all probability on to Liverpool. The first thought of the British side is not's mind is that we will not be able to do it, but it is not clear. It is not clear, but it is, on an island, it is essential to us that we should retain the freedom of the air over foreign countries. It is no use our saying to my foreigner country, 'You should not be. Very sorry, but we have no choice.' It is not clear, but it is, on an island, it is essential to us that we should retain the freedom of the air over foreign countries. It is no use our saying to my foreigner country, 'You should not be. Very sorry, but we have no choice.'

[illegible]*Journal of The Royal Air Force*

1. **AIR COUNCIL.**
President of the Air Council—The Rt Hon. Winston
Spencer Churchill, M. P., Secretary of State for Air.
Vice-President of the Air Council—The Rt. Hon. C.
Margaret, Viscountess of Londonderry, Under-Secretary of State for Air.
Members—Air-Marshal Sir H. M. Trenchard, Chief of
the Air Staff; Major-General Sir H. E. Sykes, Controller
General of Civil Aviation; Air Vice-Marshal Sir E. L. H.
Inglton, Director-General of Supply and Research; P. Wil-
son, Esq., Secretary of the Air Ministry; Sir James
Stevenson, Bar-Admiral Sir C. F. Lambart.
2. **AIR MINISTRY.**
Secretary of State for Air—The Rt. Hon. W. S.
Churchill, M. P., Under-Secretary of State for Air, The Rt.
Hon. Sir H. Morrison, Lord-Lieutenant, Secretary of the Air
Ministry, W. F. Nicholson, Esq. C. R.
- Finance Department.*
Assistant Financial Secretary.
Director of Finance for Personnel.
Director of Finance for Material.
Director of Contracts.
- Directorate of Lands (Joint Service for War Office, Na-
vies and Air Ministry).*
Director General of Lands.
Controller of Lands.
Chief Valuer and Compensation Officer.
- Department of the Chief of the Air Staff.*
Chief of the Air Staff, Air Marshal Sir H. M. Tren-
chard.
- Civil Assistant.*
Private Secretary.
Director of Operations and Intelligence.
Director of Training and Organisation.
Deputy Director of Training.
Director of Personnel.
Deputy Director.
Director of Equipment, Deputy Director of Equipment.

Municipal Air Port at Hartford, Conn.

Hartford, Conn., has taken a most progressive stand upon air traffic matters. It has an active aviation body known as the Hartford Aviation Commission which, with the Hartford Aero Club and the recently appointed aviation committee of the Connecticut Chamber of Commerce, are actively engaged in making the city and state prominent in aviation.

The Hartford Aviation Commission by acquiring jurisdiction over 66 acres of municipal property within a mile and a quarter of the center of the city on the west bank of the Connecticut River has established a municipal air port for land and water machines. The 1,000-acre field is of satisfactory proportions for present-day machines and, since all the adjacent property is open and fairly level, it affords an excellent opportunity for the development which the city has been planning for the past three months. All trees along the river bank have been removed or near the field and grading operations have been started. A most deep building and all oil and gas lines have already been located. It is anticipated that the field with runways, oil and gas, telephone connection and a dock for seaplanes will be ready by the middle of May.

On Nov. 22, 1929 the Board of Aldermen of Hartford passed a resolution that the Mayor be "authorized to appoint a commission to be known as the Hartford Aviation Commission to be composed of five citizens to hold office from the 1st day of December, 1929 until the 1st day of April, 1932. The Mayor shall fill the office of one Commissioner. The Commission held its first meeting on Dec. 15, 1929. Its members are Herman Percy Mason, President, Norman C. Desmar, Mayor, Member ex-officio, Daniel A. Meyer, Treasurer, 284 Pearl St., James H. Hadden, Secretary, 51 Kingston Street, Harrison B. Freeman and Clarence M. Keen. All members of the commission have been experienced as flying for several years, the activities of President Mason and Mr. Meyer commencing in 1901 with glider experiments, and that of the other members in actual flying experience in recent years.

The promotion of interstate aviation has been undertaken by the Connecticut Chamber of Commerce by the appointment of an aviation committee of which Judge William J. Milnes of Bristol is chairman. Other members are Homer Percy Mason of Hartford, Lloyd W. Parker of Saybrook and David W. G. Raymond of Bridgeport, and Harry C. Chappell of New London. Another member from New Haven will be named later. The purpose of this committee is to secure cooperation among the municipalities of Connecticut so the establishment of landing fields at proper points in connection with the New York to Boston air route. One of the first activities of the Chamber of Commerce aviation committee has been favorable consideration of a project to establish a flying boat passenger line between Springfield and New London with Hartford and Middletown as way stations, and which would bring the terminal ends within one hour's distance of each another. A test flight on this route took place on Apr. 10 when the Hartford Yacht Club, when an Aeromarine Navy, EIS-2L flying boat was dispatched from New York with Judge Wm. J. Milnes as a passenger.

German Air Traffic Development

The German air transport companies are making good use of the aid given by railroads and other transportation systems in the expansion of their new Eastern branches.

A German company recently opened a regular service with Fokker passenger and freight planes between Danzig, Kovno and Vilna and between Danzig and Warsaw. The first two of these Dutch planes served by air from the Fokker factory recently, one ship being made service at Wismarsünde, and machine driven 1200 lbs. of freight so the service should prove a useful connection for passengers and export supplies between the centers of Lithuania and Poland and the Baltic ports.

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SOME of us might be inclined to laugh at the idea of getting a good night's sleep aboard a fast plane. But the sleep-idea is a fact in the new Lawson Midnight Air-Line.

This roomy plane is fitted out for day or night service like an exquisitely appointed private Pullman. It's the embodiment of comfort, from sleeping berths to white enameled bathroom and shower.

Alfred W. Lawson writes of it ".....it is the largest purely commercial airplane in the world.....we used Valspar and Valspar Enamel throughout the entire ship.....thus

protects, besides giving exceptionally good results from a weatherproof standpoint, also give a very rich appearance and polish to the interior of the most complete airplane cabin brought out up to the present time."

This experienced navigator knows that no other varnish so staunchly withstands the abrupt changes of temperature—the incessant vibration—and the usual damage from rain, sun, gasoline, or hot oil.

Valspar stands up under all the rigorous tests of airplane service.

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THAT prerequisite of commercial flying — adaptability to long trips — is admirably provided in the Laird "Swallow," with its wide range and large carrying capacity. Its quick take-off facilities are in districts remote from proposed landing fields. And the splendid performance of the "Swallow" is attested with such economy as to make its commercial operation really profitable. Investigate territory open for distributors. Send coupon for descriptive booklet.

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Weight	700 lbs.	800 lbs.
Max. load	1000 lbs.	1200 lbs.
Max. speed	110 m.p.h.	120 m.p.h.
Max. climb	1000 ft. per min.	1200 ft. per min.
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Max. fuel tank	100 gal.	120 gal.
Max. engine	100 H.P.	120 H.P.
Max. propeller	100 in.	120 in.
Max. landing gear	100 in.	120 in.
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Max. landing gear	100 in.	120 in.
Max. fuel tank	100 gal.	120 gal.
Max. engine	100 H.P.	120 H.P.
Max. propeller	100 in.	120 in.
Max. landing gear	100 in.	120 in.
Max. fuel tank	1	



\$400,000

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